

In the Claims:

Self

1. A fluid flow system for a hydrotherapy-tub, said system comprising:
a body adapted for mounting to a hydrotherapy tub, said body comprising:
a first chamber therein adapted for fluid communication with a water source;
a second chamber therein adapted for fluid communication with an air source;
a plurality of outlets in fluid communication with said first chamber and said second chamber; and
wherein said plurality of outlets is configured to transmit water from said first chamber and air from said second chamber to an interior of the hydrotherapy-tub.
2. The system of claim 1 wherein said body is adapted to be mounted to cause said first chamber to be located between said second chamber and the interior of the hydrotherapy-tub.
3. The system of claim 1 wherein said body is adapted to be mounted on an inner surface of the hydrotherapy tub.
4. The system of claim 1 wherein said first chamber comprises one inlet adapted for fluid communication with the water source and said second chamber comprises one inlet adapted for fluid communication with the air source.
5. The system of claim 1 wherein the air source comprises ambient air outside said second chamber.
6. The system of claim 5 wherein at least one outlet of said plurality of outlets is adapted to draw said ambient air from the air source.

7. The system of claim 1 wherein at least one outlet of said plurality of outlets comprises a nozzle adapted to provide a water-air froth to the interior of the hydrotherapy tub.

8. The system of claim 7 wherein said nozzle is adapted to provide said water-air froth through a venturi effect caused by fluid communication of said nozzle with water from said water source, when in fluid communication with said first chamber, and air from said air source, when in fluid communication with said second chamber

9. The system of claim 7 wherein said nozzle is adapted to draw air from said second chamber, when in fluid communication with said air source, via a venturi effect.

10. The system of claim 1 wherein said second chamber comprises a plurality of air outlets configured to transmit air to at least one of said first chamber and said plurality of outlets.

11. The system of claim 1 wherein said first chamber comprises a plurality of conical structures for changing a velocity of the water, when said first chamber is in fluid communication with said water source.

12. The system of claim 11 wherein said second chamber further comprises a plurality of air outlets configured to transmit air to said plurality of conical structures, when said second chamber is in fluid communication with said air source.

13. The system of claim 12 wherein said plurality of air outlets extend from said second chamber into said plurality of conical structures.

14. The system of claim 11 wherein said plurality of air outlets is adapted to allow air to be drawn into said plurality of conical structures to cause a plurality of jets of water-air froth to be discharged to an interior of the hydrotherapy tub.

15. The system of claim 14 wherein said plurality of conical structures is adapted to cause said plurality of jets to be discharged via a venturi effect.

16. The system of claim 1 wherein said plurality of outlets comprises a plurality of air outlets located inside a plurality of water outlets, wherein said plurality of air outlets is in fluid communication with said second chamber and said plurality of water outlets is in fluid communication with said first chamber.

17. The system of claim 16 wherein said plurality of outlets is adapted to draw air through said plurality of air outlets into said plurality of water outlets via a venturi effect to cause a discharge of a plurality of jets of water - air froth to an interior of the hydrotherapy tub.

18. The system of claim 1 wherein said body is adapted to be mounted to cause a longitudinal portion of said first chamber and a longitudinal portion of said second chamber to be located about parallel to an inner surface of the hydrotherapy tub wherein said second chamber is adapted to be located between said first chamber and the inner surface.

19. The system of claim 1 wherein said body further comprises at least one outlet cover for preventing transmission of at least one of water and air to the interior of the hydrotherapy tub from at least one outlet.

20. The system of claim 16 wherein said at least one outlet cover is moveably attached to said body for at least one of covering and uncovering at least a portion of said at least one outlet.

21. The system of claim 1 wherein said first chamber comprises a water chamber and said second chamber comprises an air chamber.

22. The system of claim 1 wherein said body is adapted to conform to an inner surface of the hydrotherapy tub.

23. The system of claim 1 wherein said body is adapted to be mounted to an inner surface of the hydrotherapy tub to cause said a plurality of axes of said plurality of outlets to be substantially perpendicular to said inner surface.

24. A fluid flow system for a hydrotherapy tub, said system comprising:
a body adapted for mounting to a hydrotherapy tub, said body having a first chamber adapted for fluid communication with a water source and an second chamber adapted for fluid communication with an ambient air source;

at least one outlet adapted to receive water from said first chamber and to draw ambient air from said second chamber;

wherein said at least one outlet is configured to transmit the water and the air to an interior of the hydrotherapy-tub.

25. The system of claim 24 wherein said body comprises a water inlet adapted for fluid communication with the water source and said body comprises an air inlet adapted for fluid communication with the air source.

26. The system of claim 24 wherein said at least one outlet comprises a plurality of outlets adapted to provide a plurality of jets of water-air froth about perpendicular to a inner surface of the hydrotherapy tub.

27. The system of claim 24 wherein said at least one outlet is adapted to draw said ambient air via a venturi effect.

28. A fluid flow system for a hydrotherapy-tub, said system comprising:
a body adapted for mounting to a hydrotherapy tub, said body
comprising
a water inlet;
an air inlet; and
means for providing a plurality of jets of water-air froth to an
interior of the hydrotherapy-tub.
29. The system of claim 28 wherein said air inlet is adapted for fluid
communication with an ambient air source.
30. The system of claim 28 wherein said means for providing comprises a
means for providing said plurality of jets of water-air froth about perpendicular to an
inner surface of the hydrotherapy tub.
31. The system of claim 28 further comprising a water chamber and an air
chamber, wherein said water chamber is adapted for fluid communication with said
means for providing and a water source, through said water inlet, and the air chamber is
adapted for fluid communication with said means for providing an ambient air source,
through said air inlet.
32. The system of claim 28 wherein said body further comprises a water
chamber and an air chamber, wherein said body is adapted for mounting to an inner
surface of the hydrotherapy tub to cause said air chamber to be located between said
water chamber and the inner surface.
33. The system of claim 28 further comprising means for altering a number of
jets of water-air froth provided by said means for providing a plurality of jets.

34. A method for controlling fluid flow to a hydrotherapy tub, comprising:
providing a body adapted for mounting to the hydrotherapy tub, said
body comprising:

an air inlet;
a water inlet; and
means for providing a plurality of jets of water-air froth to an
interior of the hydrotherapy tub from the body.

35. The method of claim 34 further comprising providing fluid
communication between said air inlet and an ambient air source.

36. The method of claim 34 further comprising mounting said body to an
inner surface of the hydrotherapy tub.

37. The method of claim 34 wherein the means comprises at least one outlet,
the body further comprises at least one outlet cover and the method further comprises
moveably attaching the at least one outlet cover to the body wherein the at least one
outlet cover is adapted to cover the at least one outlet.

38. The method of claim 37 further comprising moving the at least one outlet
cover to at least one of cover and uncover at least a portion of the at least one outlet.

39. The method of claim 37 wherein the providing the body comprises
providing a water chamber adapted for fluid communication with the means for
providing and a water source, through the water inlet, and providing an air chamber
adapted for fluid communication with an air source, through the air inlet, and the means
for providing.

40. A method for controlling fluid flow to a hydrotherapy tub, comprising:
providing a body adapted for mounting to the hydrotherapy tub and
adapted to receive water and ambient air; and
providing a plurality of jets of water-air froth to an interior of the
hydrotherapy tub from the body.

41. The method of claim 40 wherein the providing comprises providing a
plurality of jets of water-air froth about perpendicular to an inner surface of the
hydrotherapy tub.